

REMARKS/ARGUMENTS:

Summary of Amendments to the Claims

Applicants have amended claims 52, 62, 66, 76, 80 and 90 to more particularly define the invention and canceled claims 54, 63, 68, 77, 82 and 91. Claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90 and 92-93 are in the application. Support of the lower limit 16% of the flash vaporization component is found in Example 5 on page 15 of the specification. In Example 5, the last sample contains 15.10% of ethanol and 0.90% of methanol, with a total of 16% of the flash vaporization component. No new matter has been added.

Claims Rejections – 35 U. S. C. § 102

The Examiner rejected all pending claims under 35 U.S.C. § 102(b) as being anticipated by Petri (EP 0 842 605 A1). Applicants respectfully traverse the rejections.

The present invention, as amended, is directed to a liquid flash-dry disinfectant composition for disinfecting an inanimate surface, comprising:

about 3% to about 30% by volume of an anti-microbial agent, said anti-microbial agent being hydrogen peroxide;

about 16% to about 85% by volume of a flash vaporization component, said flash vaporization component comprises an alcohol having 1 to 6 carbon atoms; and

about 10% to about 65% by volume of water.

Assuming the flash vaporization component is ethanol and using the density value at 20°C of 0.79 g/ml for ethanol and 1.45 g/ml for hydrogen peroxide, the composition of the present invention in weight percentages comprises:

about 4.6 % to about 43.1 % by weight of an anti-microbial agent, said anti-microbial agent being hydrogen peroxide;

about 11.5 % to about 80.4 % by weight of a flash vaporization component, said flash vaporization component comprises an alcohol having 1 to 6 carbon atoms; and

about 9.9 % to about 68.7 % by weight of water.

Petri discloses a sprayable disinfecting composition comprising:

at least 0.01% by weight of a peroxygen bleach, preferably from 0.1% to 15%, and more preferably from 0.8% to 10% by weight;

at least 0.001% by weight of an antimicrobial active of essential oil, preferably 0.006% to 10%, more preferably from 0.02% to 4% and most preferably from 0.05% to 2% by weight;

from 0.005% to 10% by weight of a shear thinning polymeric thickener, preferably from 0.01% to 5%, more preferably from 0.02% to 2% and most preferably from 0.02% to 1% by weight;

optional chelating agents at a level of up to 5% by weight, preferably from 0.002% to 3% and more preferably from 0.002% to 1.5% by weight;

optional radical scavengers at a level of up to 5% by weight, preferably from 0.01% to 1.5% and more preferably from 0.01% to 1% by weight;

optional solvents at a level up to 10% by weight, preferably from 2% to 7% by weight;

other optional ingredients such as surfactants and further antimicrobial ingredients; and water.

The Examiner contends that Petri's composition comprises "13% by volume of ethanol as an optional ingredient solvent (page 9, numbered lines 26-27 and converting 10% by weight using the density value for ethanol at 20 degree Celsius to be 0.79 g/ml, equivalent to the flash vaporization component)." The 10% by weight of ethanol as disclosed in Petri falls outside of the converted range about 11.5 % to about 80.4 % by weight of a flash vaporization component as required in the present invention. This is further confirmed by the percentage by volume. 13% by volume of ethanol as contended by the Examiner also falls outside of the range about 16% to about 85% by volume of a flash vaporization component as required in the amended claims of the present application. Therefore, Petri fails to disclose a composition comprising about 16% to about 85% by volume of a flash vaporization component, as required in the present invention. Furthermore, Petri provides no motivation to increase the solvent content to the level of the present invention.

In addition, although it may not be necessary to rinse the surface after the Petri composition has been applied and no visible residues are left onto the surface as alleged in Petri, the Petri composition does not flash-dry as the claimed composition, which once sprayed in aerosol form onto an inanimate surface to be disinfected, to flash vaporize to leave an essentially dry surface

having the anti-microbial agent deposited thereon. Since Petri teaches the use of ingredients such as antimicrobial actives of essential oils, polymeric thickeners and optional surfactants which do not vaporize quickly, it teaches away from flash-dry compositions.

In view of the foregoing reasons, Petri fails to teach each and every element of the claimed invention and therefore, does not anticipate the claimed invention. Applicants respectfully submit that the claim rejections under 35 U.S.C. 102(b) based on Petri are overcome and withdrawal thereof is requested.

Furthermore, Petri does not render the claimed invention obvious because Petri provides no motivation to make any of the following modifications, which are all necessary to arrive at the present invention: (1) selecting a lower alcohol containing 1 to 6 carbon atoms from a long list of suitable solvents listed in Petri; (2) increase the solvent level to at least 16% by volume; and (3) eliminating ingredients such as antimicrobial actives of essential oils, polymeric thickeners and optional surfactants which do not vaporize quickly. Therefore, the claimed invention is not only novel but so unobvious over Petri.

Conclusion

Based on the foregoing amendments and remarks, favorable consideration and allowance of all of the claims now present in the application are respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

The Commissioner is authorized to charge any required fees, including any extension and/or excess claim fees, any additional fees, or credit any overpayment to Goodwin Procter LLP Deposit Account No. 06-0923.

Respectfully submitted for Applicant,



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